Changes in predictive capacity when adding Ticagrelor and Clopidogrel to an existing allogeneic bloodtransfuion prediction model for cardiac surgery.

Gepubliceerd: 11-05-2021 Laatst bijgewerkt: 13-12-2022

The aim of this study is to externally validate the TRACK blood transfusion prediction model in our population. Additionally, we will study the impact of adding the preoperative use of dual antiplatelet medication, as extra predictive factor, to the...

Ethische beoordeling	Positief advies
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON22097

Bron
NTR

Verkorte titel
RUBY

Aandoening

Coronary heart disease, valvular disease, vascular disease

Ondersteuning

Primaire sponsor: Department of Cardiac Surgery and Department of Anesthesia Amsterdam UMC
Overige ondersteuning: None

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

How accurately does the TRACK model predict allogeneic blood transfusions in the Amsterdam UMC, location AMC, cardiothoracic surgery population?

Toelichting onderzoek

Achtergrond van het onderzoek

The Transfusion Risk and Clinical Knowledge (TRACK) model was developed in 2008 in an Italian adult cardiac surgery population and consists of the following 5 predictive factors: sex, age, weight, pre-operative haematocrit and complexity of surgery(6). The decision to use this specific model was based on its simplicity and relatively high predictive capacity, in comparison to other models with higher numbers of complex factors. This model has an allogeneic blood transfusion predictive capacity of 72% and uses a point system to divide patients into different risk groups, according to the total number of points allocated. During the derivation of this model in 2008, dual anti-platelet medication was included, but no significant association was found. In the 12 years since development, the popularity of dual anti-platelet medication used in acute coronary syndrome patients, has significantly improved and its association with post-operative bleeding and allogeneic blood transfusion has been suggested(10, 11).

Validating this model might aid clinicians in reducing allogeneic blood transfusions, transfusion complications and associated costs. Ultimately this might aid development of patient specific transfusion strategies and new blood management protocols.

The aim of this study is to externally validate the TRACK blood transfusion prediction model in our population. Additionally, we will study the impact of adding the preoperative use of dual antiplatelet medication, as extra predictive factor, to the TRACK blood transfusion prediction model and determine the effect on predictive capacity.

Doel van het onderzoek

The aim of this study is to externally validate the TRACK blood transfusion prediction model in our population. Additionally, we will study the impact of adding the preoperative use of dual antiplatelet medication, as extra predictive factor, to the TRACK blood transfusion prediction model and determine the effect on predictive capacity.

Onderzoeksopzet

Pre operative: Baseline Characteristic, Vital Signs, Laboratory values, transfusions, Intraoperative: Extracorporeal Characteristics, Vital Signs, Laboratory values, transfusions

Post operative: Vital Signs, Laboratory values, transfusions, 30 day mortality, 90 day mortality

Onderzoeksproduct en/of interventie

none

Contactpersonen

Publiek

Amsterdam UMC, Location Amc
Renard Haumann

0650051198

Wetenschappelijk

Amsterdam UMC, Location Amc
Renard Haumann

0650051198

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

• Patients > 18 years
• Patients receiving on-pump cardiac surgery.
• Patients receiving off-pump cardiac surgery.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

A potential patient who meets any of the following criteria will be excluded from participation in the data collection:
• Cardiac surgery for congenital disorders

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm
Blindering:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland

Status:	Werving gestart
(Verwachte) startdatum:	12-05-2021
Aantal proefpersonen:	3500
Type:	Verwachte startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nog niet bepaald

Ethische beoordeling

Positief advies

Datum:	11-05-2021
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL9464
Ander register	METC Location AMC : W21_265 # 21.291

Resultaten